AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A numerical control apparatus <u>for controlling a machine tool to shape a workpiece, the numerical control apparatus comprising</u>:

<u>a chopping movement data generating means</u> for ~~making~~<u>performing</u> ~~the~~<u>a</u> contour control<u>,</u> <u>to control a contour along which the workpiece is cut,</u> by controlling two or more control axes, ~~characterized by comprising chopping movement data generating means~~<u>and</u> for generating ~~the~~ movement data <u>of the machine tool</u> for ~~making~~<u>performing</u> ~~the~~<u>a</u> chopping operation<u>, for cutting and shaping the workpiece,</u> by controlling said two or more control axes at the same time <u>as performing the contour control, and</u>

<u>correction means for correcting a servo delay of each of said control axes to perform the chopping operation at the same time while performing the contour control,</u>

<u>wherein said correction means corrects the servo delay of each of two or more of said control axes to perform the chopping operation at the same time while performing the contour control, so as to acquire a servo delay amount of each of said control axes by comparing an actual position feedback information for each of said control axes performing the chopping operation at the same time while performing the contour control with a command value, and</u>

wherein, said correction means also synthesizes said acquired servo delay amount of each

of said control axes, and distributes said synthesized servo delay amount to a chopping

interpolation vector and a contour control interpolation vector.

2. (currently amended) A numerical control apparatus for making the a contour control of

a machine tool to shape a workpiece, by controlling two or more control axes, characterized by

the numerical control apparatus comprising:

chopping movement data generating means for generating the movement data of the

machine tool for makingperforming thea chopping operation, for cutting or shaping the

workpiece, by controlling said two or more control axes at the same time while making

performing the contour control to control a contour along which the workpiece is cut, and

correction means for correcting a servo delay of each of said control axes to perform the

chopping operation at the same time while performing the contour control,

wherein said correction means corrects the servo delay of each of two or more of said

control axes to perform the chopping operation at the same time while performing the contour

control, so as to acquire a servo delay amount of each of said control axes by comparing an actual

position feedback information for each of said control axes performing the chopping operation at

the same time while performing the contour control with a command value, and

wherein, said correction means also synthesizes said acquired servo delay amount of each

of said control axes, and distributes said synthesized servo delay amount to a chopping

interpolation vector and a contour control interpolation vector.

3. (currently amended) The numerical control apparatus according to claim 2, ~~characterized in that~~wherein said chopping movement data generating means generates the movement data for ~~making~~performing the chopping operation for said control axes at the same time while ~~making~~performing the contour control, ~~in such a manner~~so as to convolute the movement data for ~~making~~performing the chopping operation ~~and~~on the movement data for ~~making~~performing the contour control, and said chopping movement data generating means distributes~~distribute~~ said convoluted data to each of said control axes.

Claims 4 and 5 (canceled)

6. (currently amended) The numerical control apparatus according to claim 1 or 2, ~~characterized in that~~wherein a chopping operation initiation command and a chopping operation stop command are issued from any one of a processing program and a ladder portion.

7. (currently amended) The numerical control apparatus according to claim 1 or 2, ~~characterized in that~~wherein various data regarding the chopping operation ~~command~~ are set as ~~the~~ parameters in a memory, and when ~~the~~a chopping operation initiation command is issued, the chopping control is performed using various data regarding the chopping operation command set as said parameters.